

IN THE CLAIMS:

Claim 1 (canceled).

Claim 2 (currently amended): An ultrasonic diagnostic device comprising:  
an echo data obtaining unit for transmitting and receiving an ultrasonic wave to and from  
a three-dimensional space including a target tissue and obtaining three-dimensional echo data for  
each time phase;

a displacement information creator unit for creating displacement information by  
calculating an amount of displacement for each site on the surface of the target tissue based on  
the three-dimensional echo data for each of the time phases;

a displacement-present image formation unit for forming, based on the three-dimensional  
echo data and the displacement information, a three-dimensional displacement-present image in  
which displacement of each site on the surface of the target tissue is shown on a tissue image  
three-dimensionally representing the target tissue;

a two-dimensional display image formation unit for projecting the three-dimensional  
displacement-present image onto a plane to form a two-dimensional display image;

a display for displaying the two-dimensional image; and according to claim 1, further  
comprising:

a reference identifier unit for identifying, based on the three-dimensional echo data for each of the time phases, a reference point based on the structure of the target tissue, wherein

the displacement information creator unit calculates a distance between each site on the surface of the target tissue and the reference point based on the three-dimensional echo data for each of the time phases and calculates the amount of displacement based on a change in the distance between time phases.

Claim 3 (original): An ultrasonic diagnostic device according to claim 2, further comprising:

a straight line setting unit for setting a plurality of straight lines extending along a radial direction from the reference point which is the center of mass of the target tissue, wherein

the displacement information creator unit calculates a position of an intersection between each of the straight lines and the surface of the target tissue based on the three-dimensional echo data for each of the time phases and calculates the amount of displacement based on a change in the position of the intersection for the same straight line between time phases.

Claim 4 (original): An ultrasonic diagnostic device according to claim 3, wherein the displacement-present image creator unit applies a coloring process to each of the sites on the tissue image based on the amount of displacement of that site to form the three-dimensional displacement-present image.

Claim 5 (original): An ultrasonic diagnostic device according to claim 4, wherein the coloring process is a coloring process using colors absolutely determined for the amount of displacement of each site.

Claim 6 (original): An ultrasonic diagnostic device according to claim 4, wherein the coloring process is a coloring process using a color determined based on a relative magnitude of the amount of displacement in each site with respect to the amounts of displacement of the plurality of sites.

Claim 7 (original): An ultrasonic diagnostic device according to claim 4, wherein the two-dimensional display image is formed by projecting the three-dimensional displacement-present image onto a plane using a volume rendering method.

Claim 8 (currently amended): An ultrasonic diagnostic device comprising:

an echo data obtaining unit for transmitting and receiving an ultrasonic wave to and from a three-dimensional space including a target tissue and obtaining three-dimensional echo data for each time phase;

a reference point identifier unit for identifying, based on the three-dimensional echo data for each of the time phases, a reference point corresponding to based on the structure of the target tissue, wherein a displacement information creator unit calculates a distance between each site on the surface of the target tissue and the reference point based on the three-dimensional echo data for each of the time phases and calculates the amount of displacement based on a change in the distance between time phases based on the three-dimensional echo data for each of the time phases;

a movement calculator unit for calculating an amount of movement of the target tissue between the time phases based on the identified reference point;

a displacement information creator unit for creating displacement information by correcting the amount of movement based on the three-dimensional echo data for each of the time phases and calculating an amount of displacement for each site on the surface of the target tissue;

a displacement-present image formation unit for forming a three-dimensional displacement-present image in which the amount of displacement of each site on the target tissue surface is represented on a tissue image which three-dimensionally represents the target tissue, based on the three-dimensional echo data and the displacement information;

a two-dimensional display image formation unit for forming a two-dimensional display image by projecting the three-dimensional displacement-present image onto a plane; and

a display for displaying the two-dimensional display image.

Claim 9 (canceled).

Claim 10 (currently amended): An ultrasonic diagnostic device ~~according to claim 9,~~ which further:

transmits and receives an ultrasonic wave to and from a three-dimensional space including a target tissue to obtain three-dimensional echo data for each time phase;

creates displacement information by calculating an amount of displacement for each site on the surface of the target tissue based on the three-dimensional echo data for each time phase;

forms a three-dimensional displacement-present image in which an amount of displacement of each site on the target tissue surface is represented over a tissue image which three-dimensionally represents the target tissue, based on the three-dimensional echo data and the displacement information;

forms a two-dimensional display image by projecting the three-dimensional displacement-present image onto a plane and displays the formed two-dimensional display image; and

identifies, based on the three-dimensional echo data for each of the time phases, a reference point based on the structure of the target tissue, wherein

the ultrasonic diagnostic device calculates a distance between each site on the surface of the target tissue and the reference point based on the three-dimensional echo data for each of the time phases and calculates the amount of displacement based on a change in the distance between the time phases.

Claim 11 (original): An ultrasonic diagnostic device according to claim 10, which further:

sets a plurality of straight lines extending along a radial direction from the reference point which is a center of mass of the target tissue, wherein

the ultrasonic diagnostic device calculates a position of an intersection between each of the straight lines and the surface of the target tissue based on the three-dimensional echo data for each of the time phases and calculates the amount of displacement based on a change in the position of the intersection for the same straight line between the time phases.

Claim 12 (currently amended): An ultrasonic diagnostic device according to claim [[9]] 10 wherein a coloring process is applied to each of the sites on the tissue image based on the amount of displacement of that site, to form the three-dimensional displacement-present image.

Claim 13 (original): An ultrasonic diagnostic device according to claim 12, wherein the coloring process is a coloring process using a color absolutely determined for the amount of displacement of each site.

Claim 14 (original): An ultrasonic diagnostic device according to claim 12, wherein the coloring process is a coloring process using a color determined based on a relative magnitude of the amount of displacement in each site with respect to the amounts of displacement of the plurality of sites.

Claim 15 (currently amended): An ultrasonic diagnostic device according to claim [[9]] 10, wherein the two-dimensional display image is formed by projecting the three-dimensional displacement-present image onto a plane using a volume rendering method.